

ABSTRACT OF THE DISCLOSURE

A vane pump is disclosed for use with gas turbine engines that is adapted and configured to provide a failure mode similar to that of a traditional gear pump. The vane pump includes a pump housing, a cam member, a cylindrical rotor member and a mechanism for communicating a high pressure fluid from the discharge arc region to the inlet arc region when the tip surface of each vane element has experienced a predetermined amount of wear so as to prevent pump startup. The tip surface of each vane element wears as a result the sliding contact with the circumferential surface of the pumping cavity.